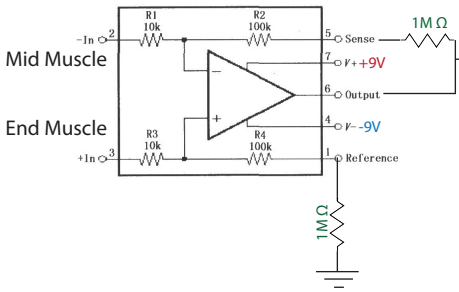


Electromyogram (EMG) Circuit Diagram

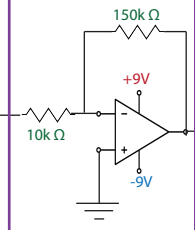
Prosthetic Design and Development OSS

Signal Aquisition



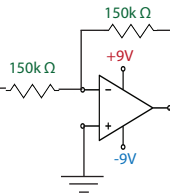
Takes difference of 2 inputs
Gain = 10

Amplification



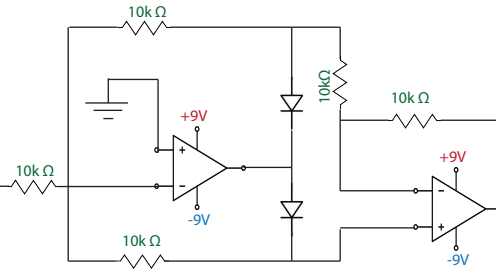
Gain = -15
(Inverts)

Filtering



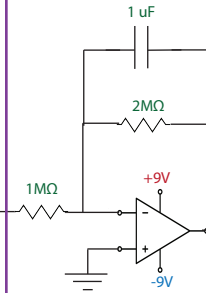
High Pass Filter:
Gain = -1
 $F_c = 106.1 \text{ Hz}$

Rectification



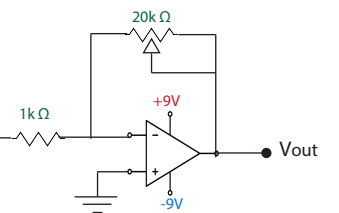
Makes signal completely
positive

Smoothing



Active Low
Pass Filter:
Gain = -2
 $F_c = .08 \text{ Hz}$

Inverting



Inverting Amplifier
Gain = -20

Vout